

ABSTRACT

Control mechanism (10) for an endoscope including first and second independently rotatable control knobs (18,20), an inner pinion shaft (22) fixed to the first control knob (18), an outer pinion shaft (28) fixed to the second control knob (20) and coaxial with the inner shaft (22) and an intermediate shaft (34) arranged at least partially inside of the outer shaft (28) and at least partially around the inner shaft (22). O-rings (42,46) between the intermediate shaft (34) and the inner and outer shafts (22,28) seal the interior of the endoscope and transfer torque from the inner or outer shaft (22,28) to the intermediate shaft (34), which is grounded against rotation and therefore does not transfer torque to the other shaft (22,28). A non-cross-coupling control mechanism is achieved in which the rotation of one control knob and its associated shaft does not have any effect on the other control knob and associated shaft.

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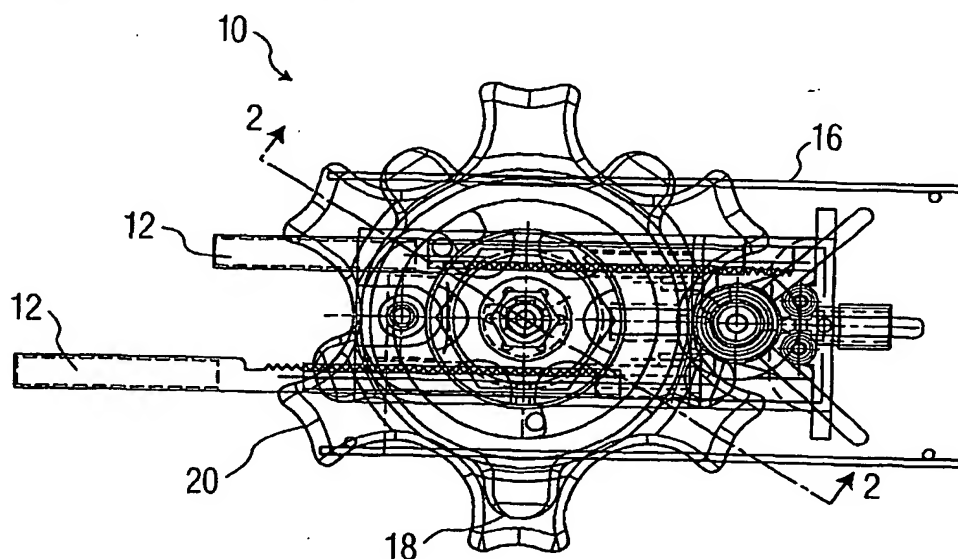
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(57) **Abstract:** Control mechanism (10) for an endoscope including first and second independently rotatable control knobs (18, 20), an inner pinion shaft (22) fixed to the first control knob (18), an outer pinion shaft (28) fixed to the second control knob (20) and coaxial with the inner shaft (22) and an intermediate shaft (34) arranged at least partially inside of the outer shaft (28) and at least partially around the inner shaft (22). O-rings (42, 46) between the intermediate shaft (34) and the inner and outer shafts (22, 28) seal the interior of the endoscope and transfer torque from the inner or outer shaft (22, 28) to the intermediate shaft (34), which is grounded against rotation and therefore does not transfer torque to the other shaft (22, 28). A non-cross-coupling control mechanism is achieved in which the rotation of one control knob and its associated shaft does not have any effect on the other control knob and associated shaft.

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**Declaration under Rule 4.17:**

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